

## ABSTRACT

A truncated series-based cavity interferometer contains a multi-reflection cavity upon which an input light beam is directed at an acute angle, to produce a spatially spread series of multiple order beams through which the transfer function (e.g., a generally square pass/stop profile) of the interferometer is defined. Because the input beam is incident upon the cavity at an acute angle, it is non counter-propagating with respect to the reflected beam, so that no circulator is required for beam separation. The intensity profile of the energy contained in the composite set of spatially separated multiple order beams comprises a spatially separated decaying series of reflections, that are intercepted by independently positionable spatial filter elements.